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Nixon & Vanderhye
1100 North Glebe Road
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EXAMINER

FOX, DAVID T

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 06/16/2003

39

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 08/070,455	Applicant(s) Hofvander et al
Examiner FOX	Group Art Unit 1638

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE -3- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 3/26/03
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1, 4, 7-23, 50-95 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 1, 4, 7-23, 51-53, 56-62, 70-72, 74-80 is/are allowed.
- ☒ Claim(s) 50, 54, 55, 63-66, 68, 73, 81-94 is/are rejected.
- ☒ Claim(s) 67, 69, 95 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 37
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The application should be reviewed for errors. Errors appear, for example, in claim 1, line 1, where “formation” was inadvertently replaced with --fermentation-- by the amendment of 31 July 1995; in claim 67, line 2, where “state” should be replaced with --stated--; in claim 69, line 3, where --a-- should be inserted after “cultivating”; in claim 91, line 2, where “s” should be replaced with --as--; in claim 94, line 1, where a comma should be inserted after “specific”; and in claim 95, line 2, where “protomer” should be replaced with --promoter--.

The amendment of 26 March 2003 is objected to for not complying with 37 CFR 1.121(c). Claims 8-9 are designated as “original” claims, but in fact were amended by the amendment of 31 July 1995. In addition, the text of claims 8-9, as reproduced in the amendment of 26 March 2003, does not reflect these amendments. In addition, claim 10, line 2 recites “the” prior to “granule”; however, this term did not previously appear in the claim in this location. Consequently, claim 10 should be designated as “currently amended”, and “the” should be underlined. In the interests of compact prosecution, the claims have been treated on their merits. Such treatment does not relieve Applicants of the responsibility to respond to these objections.

The references listed on the Information Disclosure Statement of 26 March 2003 but not submitted have been lined through on that form. The alleged submission of these references in the Interference File is insufficient, since this file is not available to the public.

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The Examiner has not received the Renewed Submission Pursuant to 37 CFR 1.44 mentioned on page 16 of the amendment of 26 March 2003. Applicants are directed to the Decision of 22 November 1994, page 2, where it is stated that a copy of the will and a translation of pages 2-4 of the estate inventory were not received by the Office; and where a legal memorandum should be submitted by Applicants either in declaration form under 37 CFR 1.68 or notarized, wherein the legal memorandum should be

executed by an attorney verifying that he is familiar with the law (heirs and legal representation thereof) of Sweden; the names of the persons authorized to act on behalf of the deceased joint inventor, under current Swedish law; and the status of current Swedish law by providing a copy of the applicable law of the relevant portions, including any necessary English translation, showing that under the laws of Sweden the so-named persons have the full power to carry out transactions of the estate.

Claims 50, 54-55, 63-66, 68, 73 and 94 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Dependent claims are included in all rejections.

Claims 50 and 68 (newly submitted) are indefinite because they are duplicates.

Claims 54 and 94 (newly submitted) are indefinite in their recitation of "essentially" which fails to adequately define the degree of sequence similarity.

Claims 55 and 73 (newly submitted) are indefinite for employing improper Markush terminology. See MPEP 2173.05(h). The following amendments would obviate this rejection:

In claim 55, line 2, replace "among" with --from the group consisting of--.

In claim 73, line 2, insert --consisting-- before "of".

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claims 81-93 (newly submitted) are rejected under 35 U.S.C. 102(g) as being anticipated by Visser et al (copending application involved in Interference No. 103579).

The claims are broadly drawn to any fragment of any sequence of the potato granule-bound starch synthase gene, which "fragment is of sufficient length to... [suppress] amylose formation when introduced into the [potato] genome", antisense constructs comprising the fragment operably linked to a promoter including the CaMV 35S or potato GBSS promoters, methods of using the fragment to obtain transformed plants with reduced amylose formation and concomitant enhanced amylopectin formation, and the resultant transformed plants and parts thereof. "Fragment of a sufficient length to suppress amylose formation" is broadly interpreted to mean any fragment of any length including an almost full-length gene with only a single base pair deleted therefrom at either end.

Visser et al were awarded priority to claims drawn to full length genes of unspecified sequence encoding potato granule-bound starch synthase of unspecified sequence, and the

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introduction of the genes into plants in antisense orientation with respect to a promoter including the CaMV 35S or potato GBSS promoters, for amylose suppression (see, e.g., page 82, bottom two paragraphs through page 84, top paragraph and the paragraph bridging pages 129 and 130 of the Decision of 25 September 2001).

Given the naturally occurring mutant forms of the full-length potato genes which may include terminal deletions of single base pairs, Visser et al inherently anticipate the claimed invention.

Claims 1, 4, 7-23, 50, and 51-80 and 94-95 (newly submitted) are free of the prior art for the reasons cited in the last Office action for claims 1, 4, 7-23 and 50.

Claims 67, 69 and 95 (newly submitted) are objected to for containing errors, as stated above.

Claims 1, 4, 7-23, 51-53, 56-62, 70-72 and 74-80 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

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1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

June 11, 2003

DAVID T. FOX
PRIMARY EXAMINER
GROUP ~~180~~ 1638

